



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/985,865	11/06/2001	Mayumi Nagasaki	Q67079	4481

7590 02/03/2006

SUGHRUE, MION, ZINN,  
MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037-3213

EXAMINER
----------

TRAN, NGHI V

ART UNIT	PAPER NUMBER
----------	--------------

2151

DATE MAILED: 02/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/985,865	Applicant(s) NAGASAKI, MAYUMI	
	Examiner Nghi V. Tran	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-6, 8-9, and 11-12 is/are rejected.
- 7) ☒ Claim(s) 4, 7, 10 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This office action is in response to the amendment filed on Jan 18, 2006. Claims 1 and 8 have been amended. Claim 14 has been added. Therefore, claims 1-14 are presented for further examination.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5-6, 8-9, and 11-12 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Applicant's Admitted Prior Art, in the Background of the Invention and Figures 5-6 (hereinafter AAPR), in view of Hourunranta et al., U.S. Patent No. 6,704,281 (hereinafter Hourunranta).

4. With respect to claims 1, 8, and 11, AAPR teaches a multimedia signal coding device [fig.5] comprising:

- an audio signal coding unit that codes an input audio signal [511];
- an audio data memory that temporarily stores a coded output of said audio signal coding unit [512];

Art Unit: 2151

- an image signal coding unit that codes an input image signal while controlling an amount of output image data according to an external control signal [521];
- coded image data memory that temporarily stores a coded output of said image signal coding unit [522];
- a control data processor that processes control data, generating a processed control signal [531];
- control data memory that stores an output of said control data processor [532];
- a multiplexer that multiplexes the data stored in said audio data memory, said image data memory and said control data memory [540], wherein processed control data is input into the multiplexer as a separate signal from coded audio data and coded image data [fig.5]; and
- an output code amount controller [550].

However, AAPR is silent on an output code amount controller that generates a control signal for controlling an amount of output data of said image signal coding unit in response to an increase or decrease in an amount of any of the multiplexer inputs, coded audio data, coded image data, or processed control data, on the basis of the output of said multiplexer through notification of said image coding unit with said generated control signal.

In a multimedia signal coding, Hourunranta discloses an output code amount controller that generates a control signal for controlling an amount of output data of said image signal coding unit in response to an increase or decrease in an amount of any of

Art Unit: 2151

the multiplexer inputs, coded audio data, coded image data, or processed control data, on the basis of the output of said multiplexer through notification of said image coding unit with said generated control signal [fig.5].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify AAPR in view of Hourunranta by controlling an amount of output data of said image signal coding unit on the basis of the output of said multiplexer through notification of said image coding unit with said generated control signal because this feature enable to adjust its spatial and temporal resolution to meet the target bit-rates set [Hourunranta, col.6, lns.44-46]. One of ordinary skill in the art at the time of the invention would have been motivated to modify AAPR in view of Hourunranta in order to control of variable-rate bit streams [Hourunranta, col.4, ln.8].

5. With respect to claims 2 and 5, AAPR is silent on said output code amount controller calculates a total amount of data stored in said audio data memory, said image data memory and said control data memory to obtain a total amount of output data of said image signal coding unit.

In a multimedia signal coding, Hourunranta discloses said output code amount controller calculates a total amount of data stored in said audio data memory, said image data memory and said control data memory to obtain a total amount of output data of said image signal coding unit [see abstract; fig.5; and col.5, ln.16 - col.6, ln.65].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify AAPR in view of Hourunranta by obtaining total amount of output data of said image signal coding unit because this feature enable to adjust its spatial and temporal resolution to meet the target bit-rates set [Hourunranta, col.6, Ins.44-46]. One of ordinary skill in the art at the time of the invention would have been motivated to modify AAPR in view of Hourunranta in order to control of variable-rate bit streams [Hourunranta, col.4, ln.8].

6. With respect to claims 3, 6, 9, and 12, AAPR is silent on said calculation includes a determination that obtains a data transmission time by dividing the total amount of output data by a predetermined amount of data transmission per unit time of said multimedia coding device, and said output code amount controller determines the amount of output data of said image signal coding unit through comparison of the transmission time with a requested transmission time.

In a multimedia signal coding, Hourunranta discloses said calculation includes a determination that obtains a data transmission time by dividing the total amount of output data by a predetermined amount of data transmission per unit time of said multimedia coding device, and said output code amount controller determines the amount of output data of said image signal coding unit through comparison of the transmission time with a requested transmission time [col.5, Ins.15-27; col.6, Ins.15-46; col.4, Ins.7-62; and figs.2-6].

Art Unit: 2151

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify AAPR in view of Hourunranta by dividing the total amount of output data by a predetermined amount of data transmission per unit time of said multimedia coding device because this feature enable to adjust its spatial and temporal resolution to meet the target bit-rates set [Hourunranta, col.6, lns.44-46]. One of ordinary skill in the art at the time of the invention would have been motivated to modify AAPR in view of Hourunranta in order to control of variable-rate bit streams [Hourunranta, col.4, ln.8].

***Allowable Subject Matter***

7. Claim 14 is allowed.

8. Claims 4, 7, 10, and 13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

9. This communication warrants no examiner's reason for allowance, as applicant's reply makes evident the reason for allowance, satisfying the record as whole as required by rule 37 CFR 1.104 (e). In this case, the substance of applicant's remarks filed on September 28, 2005 with respect to the amended claim limitations point out the reason claims are patentable over the prior art of record. Thus, the reason for allowance

Art Unit: 2151

is in all probability evident from the record and no statement for examiner's reason for allowance is necessary (see MPEP 13202.14).

### ***Response to Arguments***

10. Applicant's arguments filed January 18, 2006 have been fully considered but they are not persuasive because of the following: AAPR teaches a multimedia signal coding device [fig.5] comprising: an audio signal coding unit that codes an input audio signal [511]; an audio data memory that temporarily stores a coded output of said audio signal coding unit [512]; an image signal coding unit that codes an input image signal while controlling an amount of output image data according to an external control signal [521]; coded image data memory that temporarily stores a coded output of said image signal coding unit [522]; a control data processor that processes control data, generating a processed control signal [531]; control data memory that stores an output of said control data processor [532]; a multiplexer that multiplexes the data stored in said audio data memory, said image data memory and said control data memory [540], wherein processed control data is input into the multiplexer as a separate signal from coded audio data and coded image data [fig.5]; and an output code amount controller [550]. However, AAPR is silent on an output code amount controller that generates a control signal for controlling an amount of output data of said image signal coding unit in response to an increase or decrease in an amount of any of the multiplexer inputs, coded audio data, coded image data, or processed control data, on the basis of the output of said multiplexer through notification of said image coding unit with said



Art Unit: 2151

generated control signal. In a multimedia signal coding, Hourunranta discloses an output code amount controller that generates a control signal for controlling an amount of output data of said image signal coding unit in response to an increase or decrease in an amount of any of the multiplexer inputs, coded audio data, coded image data, or processed control data, on the basis of the output of said multiplexer through notification of said image coding unit with said generated control signal [fig.5]. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify AAPR in view of Hourunranta by controlling an amount of output data of said image signal coding unit on the basis of the output of said multiplexer through notification of said image coding unit with said generated control signal because this feature enable to adjust its spatial and temporal resolution to meet the target bit-rates set [Hourunranta, col.6, lns.44-46]. One of ordinary skill in the art at the time of the invention would have been motivated to modify AAPR in view of Hourunranta in order to control of variable-rate bit streams [Hourunranta, col.4, ln.8].

11. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Applicant obviously attacks references individually without taking into consideration based on the teaching of combinations of references as show in the above.

Art Unit: 2151

12. Therefore, the examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims. Claims 2-3, 5-6, 9, and 11-12 are rejected at least by virtue of their dependency on independent claims and by other reasons set forth above. Accordingly, Claims 1-3, 5-6, 8-9, and 11-12 are respectfully rejected as shown above.

### ***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

Art Unit: 2151

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi V Tran  
Patent Examiner  
Art Unit 2151

NT

  
**ZARNI MAUNG**  
**SUPERVISORY PATENT EXAMINER**